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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,588	12/27/2000	Adam T. Lake	42390P10255	1641

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EXAMINER

AWAD, AMR A

ART UNIT	PAPER NUMBER
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2675

DATE MAILED: 05/07/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/752,588

Applicant(s)

LAKE ET AL.

Examiner

Amr Awad

Art Unit

2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 27 December 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. Figures 1-2 should be designated by a legend such as --Prior Art—as described in the application (page 1, lines 9-10 and page 2, lines 22-24) because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. the last two lines of the invention recite “it follows from the forgoing that haptic data is transmitted”. This recitation is not clear to the examiner because it does not have logic link with the previous recitation. The Examiner respectfully requests a correction or clarification.

### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

Art Unit: 2675

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

4. Claims 1, 4-6 and 9-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Hindus et al. (US Patent NO. 6,282,206; hereinafter referred to as Hindus).

As to claim 1, Hindus teaches an apparatus includes haptel wherein a signal is generated in response to subjecting the haptel to a stimulus (col. 11, lines 6-18).

As to claim 4, as seen in col. 11, lines 6-18, Hindus shows that the device is a joystick (pointing device).

As to claim 5, Hindus teaches that the haptel is configured with an information transmission system (col. 11, lines 6-18).

As to independent claim 6, the claim is a method corresponding to the apparatus of claim 1 and is analyzed as previously discussed with respect to claim 1.

As to claim 9, as seen in col. 11, lines 6-18, Hindus shows that the device is a joystick (pointing device).

As to claim 10, Hindus teaches that the haptel is configured with an information transmission system (col. 11, lines 6-18).

5. Claims 11, 13, 16 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by MacLean et al. (US patent NO. 6,529,183; hereinafter referred to as MacLean).

Art Unit: 2675

As to claim 11, MacLean teaches a haptel (302) wherein the haptel is responsive to a signal (col. 6, lines 10-27). MacLean teaches having a quantity rendered on the haptel (col. 19, lines 42-51).

As to claim 13, MacLean teaches using the haptel device as a pointing device (in MacLean's device, the pointing device is a touch-sensitive or a pushbuttons) (col. 21, lines 6-14).

As to claim 16, method claim 16 corresponds to apparatus claim 11 and is analyzed as previously discussed with respect to claim 11.

As to claim 19, MacLean teaches using the haptel device as a pointing device (in MacLean's device, the pointing device is a touch-sensitive or a pushbuttons) (col. 21, lines 6-14).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hindus in view of Fish (US patent NO. 6,337,678).

Hindus does not expressly teach that the device comprising an arrays of haptels.

However, Fish (figure 6) teaches a haptic device that includes an array of haptels (604) (col. 8, line 63 through col. 9, line 9).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Fish to include an array of haptels to Hindus's device so as to increase the agility of the device.

8. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hindus in view of Shaw wt al. (US patent NO. 6,525,711; hereinafter referred to as Shaw)

Hindus does not teach that the stimulus is selected from the group consisting of spatial position, velocity, temperature, force, pressure and emotion.

However, Shaw teaches a haptic interface that includes interaction through force, temperature and position (col. 7, lines 19-32).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Shaw to be incorporated to Hindus so as to increase the versatilities of the device.

9. Claims 12 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacLean in view of Fish.

MacLean does not expressly teach that the device comprising an arrays of haptels.

However, Fish (figure 6) teaches a haptic device that includes an array of haptels (604) (col. 8, line 63 through col. 9, line 9).

Art Unit: 2675

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Fish to include an array of haptels to MacLean's device so as to increase the agility of the device.

10. Claims 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacLean in view of Shaw.

MacLean does not specifically teach that the stimulus is selected from the group consisting of spatial position, velocity, temperature, force, pressure and emotion.

However, Shaw teaches a haptic interface that includes interaction through force, temperature and position (col. 7, lines 19-32).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Shaw to be incorporated to MacLean so as to increase the versatilities of the device.

11. Claims 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacLean in view of Hindus.

MacLean does not teach that the haptel is configured with an information transmission system.

However, Hindus teaches that the haptel is configured with an information transmission system (col. 11, lines 6-18).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Hindus having transmission

Art Unit: 2675

system to MacLean's device so as to widen the usage of the device and therefore, increase the versatilities.

12. Claims 21, 24-26, 29-31, 34-36 and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hindus in view of MacLean.

As to claim 21, Hindus teaches an apparatus includes haptel wherein a signal is generated in response to subjecting the haptel to a stimulus, a transmitter to transmit the signal and a receiver to receive the signal (col. 11, lines 6-18).

Hindus does not teach having the quantity rendered on the haptel.

However, MacLean teaches a haptel (302) wherein the haptel is responsive to a signal (col. 6, lines 10-27). MacLean teaches having a quantity rendered on the haptel (col. 19, lines 42-51).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include MacLean's teaching of having the quantity of the haptel presented to be incorporated to Hindus's device so as to be able to measure the force of the haptel and therefore, to be able to measure the value of the haptel.

As to claim 24, as seen in col. 11, lines 6-18, Hindus shows that the device is a joystick (pointing device).

As to claim 25, Hindus teaches that the haptel is configured with an information transmission system (col. 11, lines 6-18).

As to claim 26, method of claim 26 corresponds to the apparatus of claim 21 and is analyzed as previously discussed with respect to claim 21.



Art Unit: 2675

As to claim 29, as seen in col. 11, lines 6-18, Hindus shows that the device is a joystick (pointing device).

As to claim 30, Hindus teaches that the haptel is configured with an information transmission system (col. 11, lines 6-18).

As to claim 31, Hindus teaches an apparatus includes haptel wherein a first signal is generated in response to subjecting the haptel to a stimulus, and the haptel is responsive to a second signal (the signal produced in the joystick at another communication station) (col. 11, lines 6-18).

Hindus does not teach having the quantity rendered on the haptel.

However, MacLean teaches a haptel (302) wherein the haptel is responsive to a signal (col. 6, lines 10-27). MacLean teaches having a quantity rendered on the haptel (col. 19, lines 42-51).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include MacLean's teaching of having the quantity of the haptel presented to be incorporated to Hindus's device so as to be able to measure the force of the haptel and therefore, to be able to measure the value of the haptel.

As to claim 34, Hindus shows that the device is a joystick (pointing device).

As to claim 35, Hindus teaches that the haptel is configured with an information transmission system (col. 11, lines 6-18).

As to claim 36, method of claim 36 corresponds to apparatus claim 31 and is analyzed as previously discussed with respect to claim 31.

As to claim 39, Hindus shows that the device is a joystick (pointing device).

Art Unit: 2675

As to claim 40, Hindus teaches that the haptel is configured with an information transmission system (col. 11, lines 6-18).

13. Claims 22, 27, 32 and 37 rejected under 35 U.S.C. 103(a) as being unpatentable over Hindus and MacLean in view of Fish..

Hindus and MacLean do not expressly teach that the device comprising an arrays of haptels.

However, Fish (figure 6) teaches a haptic device that includes an array of haptels (604) (col. 8, line 63 through col. 9, line 9).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Fish to include an array of haptels to Hindus's device so as to increase the agility of the device.

14. Claims 23, 28, 33 and 38 rejected under 35 U.S.C. 103(a) as being unpatentable over Hindus and MacLean in view of Shaw.

Hindus and MacLean do not specifically teach that the stimulus is selected from the group consisting of spatial position, velocity, temperature, force, pressure and emotion.

However, Shaw teaches a haptic interface that includes interaction through force, temperature and position (col. 7, lines 19-32).

Art Unit: 2675

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Shaw to be incorporated to Hindus so as to increase the versatilities of the device.

**Conclusion**

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

Keyson (US patent NO. 6,046,726) teaches a virtual workspace with user programmable tactile feedback.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amr Awad whose telephone number is (703)308-8485. The examiner can normally be reached on Monday-Friday, between 9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Saras can be reached on (703)305-9720. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9314 for regular communications and (703)872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4750.

A handwritten signature in cursive script, appearing to read "Amr Awad".

A.A  
May 1, 2003